

BOAT CREW QUALIFICATION GUIDE SURFMAN

Commandant Instruction M16114.14



(G-NRS-2)

Washington, DC 20593-0001

Phone: (202) 267-1943

COMDTINST M16114.14

16 MAY 1989

COMMANDANT INSTRUCTION M16114.14

Subj: Boat Crew Qualification Guide - Surfman

- 1. PURPOSE. This guide provides standardized procedures and guidance for the purpose of qualifying personnel as a Coast Guard Surfman.
- 2. DIRECTIVES AFFECTED. COMDTINST M16114.6, Volume III is cancelled.
- 3. DISCUSSION. Observation and comments from the users of the Boat Crew Qualification program indicated basic changes were needed in the manuals used for qualification. First, the tasks necessary for qualification were simplified by removing those that were redundant or non-essential to the mission. Second, the conditions and standards for each task were changed to establish definite performance parameters. Third, a chapter was added to provide guidance to the manual's users. Because this is a significant change, unit commanders must thoroughly read and understand this manual and COMDTINST M16114.9A (series), the Boat Crew Training Manual, prior to implementing the program. Any questions shall be resolved through discussion with Commandant (G-NRS-2).
- Area and district commanders, group commanders, and unit commanding officers shall comply with this manual when qualifying Surfmen. Surfmen assigned to a unit with small boats and already holding an SJ or SK qualification code need not requalify.

Acting Chief, Office of Navigation Safety and Waterway Services

DISTRIBUTION - SDL No. 127 е g m С р Α 8 В 20 1 С 2 5 2 D 2 Ε F G Н NON-STANDARD DISTRIBUTION B:c MLCLANT, MLCPAC (6 extra)

RECORD OF CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE	BY
NOMBER	CHANGE	ENTERED	WHOM ENTERED
,			
			: :
1			

BOAT CREW QUALIFICATION GUIDE SURFMAN

TABLE OF CONTENTS

		Page Number
Chapter I. Introduction	n	I-1
A. System Overview		I-1
B. Description of t	he Manual	1-2
C. Instructor Guida	nce	I-5
D. Trainee Guidance		I-8
E. Task List for Co	xswain	I- 9
Enclosure (1), Task	Accomplishment Record for Coxswain	1
Chapter II. Tasks		II-1-1
Division One - Surf	Operations	II-1-3
SRF-01-01-ANY SRF-01-02-TYPE SRF-01-03-TYPE SRF-01-04-ANY SRF-01-05-TYPE SRF-01-06-TYPE SRF-01-07-TYPE SRF-01-08-TYPE SRF-01-09-TYPE SRF-01-10-TYPE SRF-01-11-ANY	Perform Surf Swim	II-1-7 II-1-9 II-1-13 II-1-15 II-1-17 II-1-19

COMDTINST M16114.14

		Page Number
Division Two - Surf R	coll Over and Surf Casualty Procedure	s II-2-1
SRF-02-01-ANY SRF-02-02-TYPE	Procedures during Rollover Procedures after Rollover	II-2-3 II-2-5
Division Three - High	Seas/Rough Weather Operations	II-3-1
SRF-03-01-ANY SRF-03-02-ANY SRF-03-03-TYPE SRF-03-04-TYPE SRF-03-05-TYPE SRF-03-06-TYPE SRF-03-07-TYPE SRF-03-08-TYPE	Effects of High Seas	II-3-5 II-3-7 II-3-9 II-3-11 II-3-13

CHAPTER I

INTRODUCTION

A. System Overview - The Boat Crew Qualification Guides are an integral part of the boat crew qualification and certification process. Each manual contains a collection of tasks which must be learned, practiced, and performed by the trainee. These tasks represent the minimum elements of skill and knowledge necessary to the safe and effective performance of the duties of a crewmember aboard Coast Guard boats. The following is a brief synopsis of the process and explains where this manual and the people who use it fit in.

Steps in the Qualification and Certification Program process:

- 1. The trainee is designated to the training program by the unit command.
- 2. An experienced petty officer is assigned as the trainee's primary instructor.
- 3. The trainee completes the appropriate qualification guide.
 - a. Trainee is assigned task
 - b. Task is demonstrated to trainee
 - c. Trainee is walked through task
 - d. Trainee practices task
 - e. Trainee demonstrates proficiency in task up to task standard
 - f. Task is signed off
- 4. An experienced petty officer, designated by the unit boat crew training board, and not the trainee's instructor, gives the trainee a comprehensive check ride.
- 5. The unit Boat Crew Training board interviews the trainee and provides a positive recommendation to the command.
- 6. The unit commander certifies trainee's qualification in the appropriate crew position.

While using this manual the trainee, with the help of his/her instructor will be completing the first three steps of this process. For a complete discussion of the qualification/certification program refer to COMDTINST M16114.9 (Series), The Boat Crew Training Manual.

B. <u>Description of the Manual</u> - This manual is one volume of the Boat Crew Qualification Guide. Four manuals make up the guide, they are:

COMDTINST M16114.10 - Boat Crewman COMDTINST M16114.11 - Coxswain COMDTINST M16114.6 - Engineer COMDTINST M16114.14 - Surfman

I.B (cont'd)

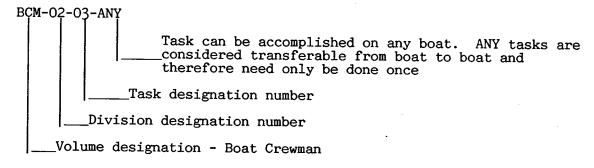
- 1. Each manual is made up of three major Chapters the Introduction, the Qualification Tasks, and the Trainee Study Guide. Right now you are reading the Introduction CHAPTER I. In it are explanations of the qualification/certification system, descriptions of the qualification manuals, and guidance concerning the responsibility of the instructor and the trainee while using these qualification guides.
- 2. Chapter II is made up of the qualification tasks. The tasks are gathered into separate divisions by function. The following is an example and discussion of the task format.

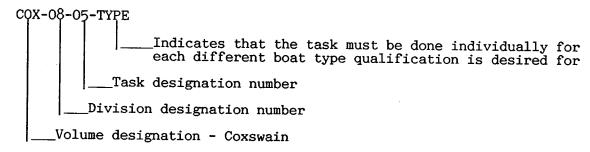
(a.)	TASK BCM-02-01-ANY
(b.)	TASK: IDENTIFY THE DIFFERENT PARTS OF A LINE AND THE HITCHES USED IN LINE HANDLING
(c.)	REFERENCES: (a) Boat Crew Seamanship Manual, COMDTINST M16114.5 (Series)
(đ.)	CONDITIONS: Task should be performed at any time, on board one of the unit's boats without the use of any references or prompting.
(e.)	STANDARDS: In response to the instructor, the trainee must, without error, identify different parts of a line and basic knots.
(f.)	PERFORMANCE CRITERIA COMPLETED
	1. Bitter end of line correctly identified.
	2. Standing part of line correctly identified.
	3. Bight made in the line.
(g.)	ACCOMPLISHED: /
(h.)	COMMENTS: INSTRUCTOR DATE

Figure I-1

a. The designation code (see figure I-1) - Tasks are located by a single designation. Below are three examples with explanations of the qualification task designations:

I.B.2.a (cont'd)





- b. TASK: (see figure I-1) The individual knowledge or skill item to be performed
- c. <u>REFERENCE</u>: (see figure I-1) Information sources used by the trainee and instructor to obtain the background necessary to task performance.
- d. <u>CONDITIONS</u>: (see figure I-1) The <u>conditions</u> are the environmental and physical circumstances in which the tasks must be performed. Any tools or special equipment needed for the completion of the task are listed here. The conditions listed with each task are the minimum conditions which the trainee must be able to perform the task before the instructor should be satisfied with that performance.
 - (1). The following definitions describe the terms found in the Conditions and Standards:

Boat Operations

Slow Underway and moving ahead at clutch speed or slower

Underway Not tied to a pier or float and not

anchored or moored

Visibility

Restricted Visibility less than 1/4 mile

Clear All other states of visibility

I.B.2.d (cont'd)

Sea Conditions

Calm Seas 1 foot or less

Moderate Seas 3 to 5 feet

Heavy Seas 6 feet and over

During the period a member is qualifying, the minimum standards regarding weather are just that, minimums. This qualifying period should include wind and sea conditions appropriate for the area, not just surf training. The unit commander should set maximum weather limitations in conjunction with Commandant policy. Then insure the trainee practices and becomes proficient in these varied conditions and not just the minimums prior to qualification. Some geographic areas consistently have higher wind, sea and surf states than others, thus a currently certified surfman with PCS orders to one of these units may require additional training in these conditions prior to local certification.

- e. <u>STANDARDS</u>: (see figure I-1) Standards describe the expected outcome of the task. Successful task completion is a function of how well a student is able to complete the task without assistance. The levels of performance provided in this paragraph represent <u>minimum</u> standards. Generally Task performance standards are as follows:
 - (1). Knowledge Tasks Trainee must be able to cite from memory the required information. Instructors may wish to ask questions concerning particular steps for accomplishment in order to measure the Trainees' total comprehension of the subject matter.
 - (2). Skill Tasks Trainees must be able to perform all manual tasks without prompting or assistance from the instructor. Each task demonstration must follow the correct sequence with little or no hesitation between the steps for accomplishment.
- f. <u>PERFORMANCE CRITERIA</u>: (see figure I-1) These steps delineate the procedure that is best followed for performing each task. They can be utilized in two basic ways:
 - (1). The steps can be used as an aid in learning the task. Some steps for task accomplishment follow exact procedures which are required for performing a particular operation or using a specific piece of equipment, while others serve as general guidelines for task completion.
 - (2). They provide a performance check-off which can be used by the instructor to measure trainee performance when the trainee performs the task.

I.B.2 (cont'd)

- g. <u>ACCOMPLISHED</u>: (see figure I-1) The designated instructor must print his/her name and rate, sign and date this line attesting that the trainee can successfully perform the task up to prescribed standards.
- h. <u>COMMENTS</u>: (see figure I-1) The comment section can be used to describe circumstances or conditions which might have a bearing on task completion. Failure to perform any element or unsatisfactory performance of an individual element should be noted in the comments section for the task. If the task is completed under more arduous circumstances than those described, a notation should be made.
- 3. At the end of Chapter I (Enclosure (1)) is a list of all the tasks in this instruction with space for the instructor to initial and date when each task has been completed.
- Instructor Guidance After being assigned by your command as an instructor, and before beginning your duties, you should carefully read this chapter and familiarize yourself with the remainder of this manual. You should also read COMDTINST M16114.9 (Series) The Boat Crew Training Manual. After you are thoroughly familiar with the program you may then continue with your duties preparing and guiding your assigned trainee through the qualification and certification program.
 - 1. <u>Duties</u> The instructor must be keenly aware of not only how, but how well a task is performed. The instructor should set high standards of performance for trainees as they progress through the qualification guides. The instructors duties include:
 - a. Guiding the trainee through the qualification process as per the instructions in chapter I of each qualification guide
 - b. Teaching skills to trainees
 - c. Observing trainee skill development during unit operations and training
 - d. Recommending certification
 - e. Maintaining own proficiency training and technical knowledge

I.C. (cont'd)

2. <u>Guiding the trainee through the process</u> - Tasks are meant to be learned through constant practice, under your guidance as the instructor. You accomplish this by following the procedural steps listed below:

Assign the task

|
Demonstrate the task
|
Walk the trainee through the task
|
Monitor the trainee's practice
|
Verify the trainee's performance

Sign off the task

Keep an accurate record of the training

- a. Assign the task to the trainee While divisions may at times be done concurrently, the tasks within each division should normally be accomplished in consecutive order.
 - (1). Which tasks must be completed depends on the crew position and type of boat being qualified on. Those tasks which must be accomplished to qualify for each particular boat type are listed in section E. of this introduction.
 - (2). Tasks designated as "TYPE" tasks are considered to be specific to each boat type (see table I-1.). These must be done individually, and repeated, for each boat type qualification is desired for.
 - (3). Tasks designated as "ANY" tasks are considered general in nature. Completion of these tasks on any boat type is sufficient for the qualification process and they need not be repeated when qualification is desired on another boat type.
- b. Check for completion of the task's reading assignment You should take care at this point to clarify any misunderstandings the trainee might have about the material.
- c. Demonstrate the task to the trainee This should be done using the steps outlined in the task, you should explain what you are doing, and why, as you do it. If the task is one of the few that doesn't require demonstration, go on to step f.

I.C.2. (cont'd)

- d. Walk the trainee through the procedural steps of the task In order to ensure trainee understanding you may want to walk the trainee through the steps more than once. There is no limit on the amount of time the walk through can take, but you must ensure all steps are understood before continuing.
- e. Monitor the trainee's practice Trainee performance should be monitored during both training and operations. Qualification doesn't end with the first successful completion of the task but is an on-going process that doesn't end until the standard can be met consistently.
- f. Verify that the trainee's performance meets the standard This includes two parts. First, the trainee must be able to
 do the task subject to any specific conditions and up to any
 specific standards delineated for the task, and second, the
 trainee must be able to do it unsupervised.
 - (1) The trainee is not expected to do each task to the level of its specific standard with every performance, but the instructor should be confident that the trainee is capable of consistently meeting that standard before the task is signed off. Being able to work unsupervised is a general standard imposed on all tasks. Some tasks may only require the trainee to do it once to meet the standard. Some may require a lot of practice. Only the instructor can say when the standard has been met.
- g. Sign off the task at the bottom of the page This should only be done when the instructor is confident the trainee can perform the task, consistently, while unsupervised.
- h. Keep a good record of the training The instructor has responsibility for keeping the trainee's record of training in this manual correct and up to date. This manual should be maintained by the instructor, not the trainee. Only the reading assignments should be given to the trainee. After a task has been signed off by the instructor it can be removed and placed in the trainee's training record.
 - (1). As a quick reference of the trainee's progress, you should maintain the task list located at the end of Chapter I (Enclosure (1)). This is accomplished by entering the start date as each task is assigned and then initialing and entering the completion date as each task is completed.
- i. Inform your command when the manual is completed When the trainee has completed all tasks designated for the crew position and boat type the qualification is being done for you should inform your unit training officer that the trainee is ready to progress to the next step in the qualification and certification process.

I.C (cont'd)

- 3. Method Instructors should become familiar with the strengths and weaknesses of each student and should strive to adjust teaching methods to each. They should maintain open communications with the student so that incorrect procedures or bad work habits on the part of the student are detected early and corrected. Instructors should draw on the expertise of senior unit members and the OIC for technical or procedural advice and information.
- 4. Qualification. It is important that every instructor understand the significance of the standards of performance listed for each task in the Qualification Guide. Instructor responsibilities here are twofold: one, to actively teach the trainee how to perform the task up to the required level of mastery implied by the conditions and standards listed for a task. Two, and most important, the instructor should not sign off a task as completed until he/she is satisfied that the trainee is fully capable of performing the task unsupervised.
- 5. Certification Recommendation When the trainee has completed the appropriate qualification guide the instructor must make a positive recommendation to the Boat Crew Examining Board. This recommendation is never given until the instructor is satisfied that the trainee can carry out assigned boat crew duties consistently and unsupervised.
- 6. Proficiency maintenance and technical knowledge It is imperative that a very high level of professionalism be maintained among all unit instructors. Therefore current proficiency training standards must be kept up to date as well as a knowledge of recent technological changes or procedures which affect small boat operations.
- D. <u>Trainee Guidance</u> It is the trainee's responsibility to learn the material in this manual up to the standards presented. The tasks that make up Chapter II of this book represent those skills you will be using in your job as boat crewman. There are four parts to this learning process.
 - 1. The first part is for the instructor to demonstrate the task to you. While the task is being demonstrated you must pay particular attention and ask as many questions as necessary to understand what is being demonstrated.
 - Second, you will be walked through the task by your instructor. The walk through should be done at a speed, and as many times as necessary, for your understanding.
 - 3. Third, you must practice the skill. Though there are a few skills in the qualification manual that do not require practice, most do, and plenty of it. Your instructor will not sign off any task as complete until you can show you are capable of consistently doing the task, unsupervised, under the conditions and up to the specific standards stipulated for the particular task.

I.D (cont'd)

4. When you have finished with all of the appropriate tasks in the manual you will be ready to begin the certification process.

E. TASK LIST FOR BOAT SURFMAN

Only those tasks applicable (marked with an "X") for type of boat being qualified on need be done.

		BOA	TYPE	TO BE	TRAIN	ED FOF	L	
TASK .	SRB	MLB	52 MLB					
SRF-01-01-ANY PERFORM SURF SWIM	х	х	х			. *		
SRF-01-02-ANY ID TYPES OF BREAKING SEAS	Х	х	Х		-			
SRF-01-03-TYPE FORCES EFFECT BOAT OPS	Х	х	х.					
SRF-01-04-ANY ID SAFETY PRECAUTIONS	Х	х	х					
SRF-01-05-TYPE STATION KEEPER	X	X	X					
SRF-01-06-TYPE TRANSIT OUT INLET/BAR	Х	х	х					
SRF-01-07-TYPE TRANSIT IN INLET/BAR	Х	х	х					
SRF-01-08-TYPE TRANSIT BEAM SEAS	Х	Х	X					
SRF-01-09-TYPE TRANSIT BEACH SURF	Х	х	Х					
SRF-01-10-TYPE RECOVER PERSON IN WATER	X	х	Х					
SRF-01-11-ANY CAUSE OF LOCAL SURF	X	Х	Х					
SRF-02-01-ANY PROCEDURE DUR- ING ROLLOVER	Х	х	Х					
SRF-02-02-ANY PROCEDURE AFTER ROLLOVER	Х	Х	х					

COMDTINST M16114.14

I.E (cont'd)

		BOA'	T TYPE	TO BE	TRAIN	ED FOR		
TASK	SRB	MLB	52 MLB					
SRF-03-01-ANY EFFECTS OF HIGH SEAS	х	х	х					
SRF-03-02-ANY PRECAUTIONS IN HEAVY SEAS	х	х	х				-	
SRF-03-03-TYPE OPERATE IN HIGH SEAS	Х	х	Х					
SRF-03-04-TYPE TOW IN HIGH SEAS	х	х	x		·			
SRF-03-05-TYPE PASS PUMP IN HIGH SEAS(DIR)	х	х	Х	·				
SRF-03-06-TYPE PASS PUMP IN HIGH SEAS (TOW)	X	х	х					
SRF-03-07-TYPE TOW VESSEL WITH DROGUE	х	х	Х					
SRF-03-08-TYPE NAVIGATE IN HIGH SEAS	х	х	х					

TASK ACCOMPLISHEMENT RECORD FOR BOAT SURFMAN Instructor should remove this section and put it in the trainee's training record. TRAINEE NAME: RATE: INSTRUCTOR NAME: _____ RATE: ____ POSITION QUALIFICATION CODE TO BE TRAINED FOR: TASK DATE STARTED DATE COMPLETED | INSTRUCTORS INITIALS SRF-01-01-ANY PERFORM SURF SWIM SRF-01-02-TYPE ID TYPES OF BREAKING SEAS SRF-01-03-TYPE FORCES EFFECT BOAT OPS SRF-01-04-ANY ID SAFETY **PRECAUTIONS** SRF-01-05-TYPE STATION KEEP SRF-01-06-TYPE TRANSIT OUT INLET/BAR SRF-01-07-TYPE TRANSIT IN INLET/BAR SRF-01-08-TYPE TRANSIT BEAM SEAS SRF-01-09-TYPE TRANSIT BEACH SURF SRF-01-10-TYPE RECOVER PERSON IN WATER

SRF-01-11-ANY CAUSE OF

LOCAL SURF

2

Encl: (1) to COMDTINST M16114.14

TASK	DATE STARTED	DATE COMPLETED	INSTRUCTORS INITIALS
SRF-02-01-ANY PROCEDURE DURING ROLL- OVER			
SRF-02-02-ANY PROCEDURE AFTER ROLL- OVER			· · ·
SRF-03-01-ANY EFFECTS OF HIGH SEAS		:	
SRF-03-02-ANY PRECAUTIONS IN HEAVY SEAS			
SRF-03-03-TYPE OPERATE IN HIGH SEAS			
SRF-03-04-TYPE TOW IN HIGH SEAS			
SRF-03-05-TYPE PASS PUMP IN HIGH SEAS(DIR)			
SRF-03-06-TYPE PASS PUMP IN HIGH SEAS (TOW)			
SRF-03-07-TYPE TOW VESSEL WITH DROGUE			
SRF-03-08-TYPE NAVIGATE IN HIGH SEAS			

TRAINEE NAME:	
INSTRUCTOR NAME:	

CHAPTER II

SURFMAN QUALIFICATION TASKS

MINIMUM REQUIREMENTS FOR ALL SURFMAN

The purpose of this manual is to set forth the minimum requirements for Surfman. All prospective Surfmen must be:

- a. Assigned to an operational unit with a 44'/52' MLB or 30' SRB attached, and
- b. Be a certified coxswain aboard an 44' MLB.

In addition to the above, the operational unit must have a bar or inlet, and surf conditions that meet the conditions prescribed in this manual.

Upon completion of each task, the instructor will sign and date each individual task successfully completed. Some units may establish additional requirements due to the larger operational bars, Inlets and Surf Conditions.

Boat Crew Examination Board (BCEB), and a qualification check ride shall be provide as prescribe in COMDTINST M16114.9A (series) and appropriate PMIS entries for Surfman (SK or SJ) will be entered in the individuals service record.

Instructions:

- 1. This chapter is to be kept by the instructor. The Task Accomplishment Record is to be kept in the trainee's training record. Their purpose is to provide a record of the trainee's progress through the qualification tasks.
- 2. The instructor should present the tasks to the trainee in a logical order using chapter I paragraph C. of this instruction as guidance.

COMDTINST M16114.14

Instructions: (cont)

3. Tasks and the Task Accomplishment Record should be signed and dated when the instructor is satisfied that the trainee can perform a task up to all standards and under the specified conditions for the task.

DIVISION ONE

SURF OPERATIONS

1. GENERAL OBJECTIVES:

- a. Identify and explain the basic types and causes of breaking seas.
- b. Identify and explain the dynamic forces effecting the operation of a surf boat in surf.
- c. Demonstrate a working knowledge and ability to safely operate a surf boat in surf.
- d. Explain local surf conditions and how they are created.

2. TASK LISTING:

- SRF-01-01-ANY Perform Surf Swim.
- SRF-01-02-ANY Identify the types of breaking seas, their characteristics, causes, and how they effect boat operations.
- SRF-01-03-TYPE Explain the forces effecting a boat operating in surf.
- SRF-01-04-ANY Identify safety precautions and equipment for surf operations.
- SRF-01-05-TYPE Demonstrate ability to maintain a stationary position, "station keep", in surf.
- SRF-01-06-TYPE Demonstrate ability to transit outbound on an inlet or bar through 6-8 foot surf.
- SRF-01-07-TYPE Demonstrate ability to transit inbound on an inlet or bar through 6-8 foot surf.
- SRF-01-08-TYPE Demonstrate ability to transit beam seas in 6-8 foot surf.
- SRF-01-09-TYPE Demonstrate ability to enter, transit, and depart a beach surf zone in 6-8 foot surf.
- SRF-01-10-TYPE Demonstrate ability to recover a simulated person in the water in surf.
- SRF-01-11-ANY Explain the geographical causes of local surf conditions.

TASK SRF-01-01-ANY

TASK:

PERFORM SURF SWIM.

REFERENCE: (a) Chapter 2, and 18, Boat Crew Seamanship Manual, COMDTINST M16114.5 (Series)

CONDITION:

Task will be performed while underway during daylight hours only, in fair weather conditions, in four-foot surf, in good visibility and under direct supervision of a certified Surfman. The trainee will be completely outfitted with hypothermia protective clothing and the contents of the boat crew signal kit as specified in the CG Rescue and Survival Systems Manual (COMDTINST M10470.10 series). Two "safety observers", a "beach party", and "portable radio" is required. There will be a safety observer onboard the boat, who must be a certified Coxswain, and will check the operational condition of survival equipment being utilized. The "second" safety observer, who must also be a certified Coxswain/Surfman, is responsible for supervision of the beach party and establishing communications with the boat. In addition, the beach party will consist of two line handlers (one of which may be the second safety observer), two designated safety swimmer and an EMT. All beach party members must be certified as a boat crewmember. At no time will the trainee enter the water until directed to do so by the boat's coxswain.

NOTE: The Safety Observer onboard the boat shall not be the coxswain of the boat.

STANDARDS:

Donning full survival equipment, swim 75-100 yards through four foot surf, using the side and/or breast stroke and following all safety procedures. Keep head facing the beach. The "buddy system" must be used.

PERFORMANCE CRITERIA

COMPLETED	
1.	Explained the procedures and techniques for swimming in surf, and safety procedures to be observed.
2.	Properly donned hypothermia protective clothing.

TASK SRF-01-01-ANY

	TNSTRUCTOR	DAME
	ACCOMPLISHED: /	
 _6.	Identified safe operating area and hazards.	
 _5.	Used proper method for entering the water.	
_4.	Explained emergency procedures (as established locally).	eđ
 _3.	Understood the buddy system of swimming.	

TASK SRF-01-02-ANY

TASK:

IDENTIFY THE TYPES OF BREAKING SEAS, THEIR CHARACTERISTICS, CAUSES, AND EFFECT ON BOAT OPERATIONS.

REFERENCE: (a) Chapter 7, Boat Crew Seamanship Manual, COMDTINST M16114.5 (Series)

CONDITIONS:

Task performed at anytime or place. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

The trainee must state, without error, the types of breaking seas, their causes, characteristics, and how they effect boat operations.

PERFORMANCE CRITERIA

COMPLETED	
1.	Stated types of breakers.
2.	Stated causes of each type.
3.	Stated effects of bottom contour, jetties, islands, and obstructions.
4.	Stated effects of winds.
5.	Stated how each type of break will effect the boats basic operations.
6.	Explained the effects of current on breaking seas.
	ACCOMPLISHED: /
	INSTRUCTOR DATE

TASK SRF-01-03-TYPE

TASK:

EXPLAIN THE FORCES EFFECTING A BOAT OPERATING IN SURF.

REFERENCE: (a) Chapter 8, Boat Crew Seamanship Manual, COMDTINST M16114.5 (Series)

CONDITION:

Task performed at anytime or place. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

The trainee must state, without error, the forces effecting a boat operating in surf.

PERFORMANCE CRITERIA

COMPLETED		
1.	Stated effects of aerated water on rudders and propellers.	
2.	Stated the effects of shallow water concerning maneuverability.	
3.	Stated effects of meeting surf with all power rang	res.
4.	Stated effects of excessive speed cause when meetia break.	.ng
5.	Stated causes of roll over.	
6.	Stated causes of pitchpoling.	
7.	Stated effects of changes in center of gravity.	
	ACCOMPLISHED:	
	INSTRUCTOR DATE	

TASK SRF-01-04-ANY

TASK:

IDENTIFY SAFETY PRECAUTIONS AND SAFETY EQUIPMENT FOR SURF OPERATION.

REFERENCE: N/A

CONDITION:

Task performed on boat at anytime. Trainee must accomplish task without prompting or use of a reference.

STANDARD:

The trainee must state, without errors, the safety precautions and safety equipment for surf operations.

PERFORMANCE CRITERIA

COMPLETED	
1.	Stated maximum training conditions.
2.	Stated maximum operational conditions.
3.	Stated required survival equipment.
4.	Stated procedures for use of boat crew safety belts.
5.	Stated procedures for reducing body stress.
6.	Stated likely missile hazards.
7.	Stated action of crew in the event the windshield is struck by a breaker.
8.	Stated procedures for surf operations boat check stated.
9.	Described location of safety belt attachment points and crew positioning.

TASK SRF-01-04-ANY

	ACCOMPLISHED:				/	
	ACCOMPL TOURS				,	•
					•	•
_11.	Stated maximum	size	of	operational	surf.	
_10.	Stated maximum	Size	OI	training sui	ci.	
10	Stated massimum			A		
	_10. _11.	_11. Stated maximum	_11. Stated maximum size	_11. Stated maximum size of	_11. Stated maximum size of operational	_11. Stated maximum size of operational surf.

TASK SRF-01-05-TYPE

TASK:

DEMONSTRATE ABILITY TO STATION KEEP IN SURF.

REFERENCES:

CONDITIONS:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

COMDI EMER

Task must be done without endangering the boat or crew. Boat must maintain stationary position for at least five minutes with limited movement. Boat must maintain head to attitude at all times except when lateral movement is necessary.

PERFORMANCE CRITERIA

COMPTELED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering system controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Identified natural range and landmarks.
7.	Identified safe operating area and hazards.
8.	Maintained bow aspect when in surf.
9.	Used proper power to meet breakers and hold position.

TASK SRF-01-05-TYPE

10.	Used proper helm, throttle commands to on position to the seas.	achieve a bow
11.	Used small swells and surf to maneuver position.	and hold
12.	Used proper communications between cox	swain and crew.
13.	Maintained position within 50 feet for	5 minutes.
	ACCOMPLISHED: / INSTRUCTOR	DATE

TASK SRF-01-06-TYPE

TASK:

DEMONSTRATE ABILITY TO TRANSIT OUTBOUND ON AN INLET OR BAR THROUGH 6-8 FOOT SURF.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must cross at least three lines of breaks at least five times. If possible, all surf should be avoided without meeting a breaker. Boat must meet breakers with enough power to get the boat through the wave.

PERFORMANCE CRITERIA

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Identified safe operating area and hazards.
<u> </u>	Avoided breaking waves, if possible.
8.	Used highest, comfortable, speed.

		INSTRUCTOR		DATE
	ACCOMPLISHED:			
		•		
			٠	
++•	Used proper commun	nication betweer	n coxswain a	and crew.
11.	lised proper commun	signtion between		_
	white water (if b	reaker is unavoi	idable).	i, in the
10.	Maneuvered boat in	n time to take h	reak hou o	
9.	Met surf with app	ropriate power.		
	TASK S	RF-01-06-TYPE		

TASK SRF-01-07-TYPE

TASK:

DEMONSTRATE ABILITY TO TRANSIT INBOUND ON AN INLET OR BAR THROUGH 6-8 FOOT SURF.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must cross at least three lines of breaks at least five times. Maximum effort should be taken to keep the boat from being over taken by a breaker. Boat must be maneuvered in adequate time to avoid a breaker on the stern.

PERFORMANCE CRITERIA

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Identified safe operating area and hazards.
7.	Timed series to turn and run through surf zone on the lull.

TASK SRF-01-07-TYPE

	INSTRUCTOR	DATE
	ACCOMPLISHED: /	
12.	Used proper communication between coxswa	in and crew.
11.	Used proper power to turn and meet break	ers.
10.	Evaluated overtaking surf, turned into o appropriate.	r met as
9.	Used highest safe speed.	
8.	Avoided breaking waves, if possible.	

TASK SRF-01-08-TYPE

TASK:

DEMONSTRATE ABILITY TO TRANSIT BEAM SEAS IN 6-8 FOOT SURF.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must transit 150 yards in surf zone at least five times. Boat must not be overtaken by a breaker on the beam.

PERFORMANCE CRITERIA

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Identified safe operating area and hazards.
7.	Identified natural ranges and used.
8.	Avoided breaking waves, if possible.
9.	Used highest comfortable speed.
10.	Evaluated approaching surf, avoided or met as appropriate.

TASK SRF-01-08-TYPE

11.	Used proper pass forward	power to meet d of the boat.	breakers	or let t	the swell
12.	Used proper	communication	between	coxswain	and crew.
·	· .				
	ACCOMPLISHE	D:INSTRU	JCTOR		DATE

TASK SRF-01-09-TYPE

TASK:

DEMONSTRATE ABILITY TO ENTER, TRANSIT, AND DEPART A BEACH SURF ZONE IN 6-8 FOOT SURF.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must enter surf zone from seaward, transit 150 yards and leave surf zone. Repeat at least five times. All effort must be taken to avoid breaking surf over the stern.

PERFORMANCE CRITERIA

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Identified safe operating area and hazards.
7.	Evaluated effects of shore currents.
8.	Identified natural ranges and used.
9.	Timed series and made approach turn during lull.
10.	Used highest comfortable speed.

TASK SRF-01-09-TYPE

	INSTRUCTOR	DATE
•	ACCOMPLISHED:/	
16.	Used proper communications between coxswain	and crew.
15.	Aware of depth.	
14.	Maintained bow aspect in surf at idle.	
13.	Avoided breaking waves if possible.	
12.	Used proper power to meet breakers.	
11.	Evaluated approaching surf, avoided or met a appropriate.	ns

TASK SRF-01-10-TYPE

TASK:

DEMONSTRATE ABILITY TO RECOVER A SIMULATED PERSON IN THE WATER IN 6-8 FOOT SURF.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot surf. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must proceed from a point at least 150 feet seaward from the simulated person in the water and accomplish a recovery. Recoveries will be accomplished without endangering the simulated person (OSCAR) in the water.

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Boat inspected with all loose gear stowed and water tight integrity maintained.
4.	Tested engine and steering controls prior to entering surf zone.
5.	Observed surf conditions and evaluated.
6.	Stationed pointer inside pilot house.
7.	Evaluated surf conditions.
8.	Used lulls in breaks for turns.
9.	Simulated person in water passed and given life ring if appropriate.
10.	Positioned boat properly down sea for final approach.

TASK SRF-01-10-TYPE

	INSTRUCTOR	DATE
	ACCOMPLISHED: /	
·		
15.	Picked up from well deck only.	
14.	Pickup close alongside at point ofr l without endangering person in water.	owest freeboard
13.	Used lulls in breaks for final approa	ich.
12.	Broke proper retrieval equipment out.	
11.	Positioned pick up man in position fo	or recovery

TASK SRF-01-11-ANY

ጥአ	C	v	
TW	S	N	ě

EXPLAIN LOCAL SURF CONDITIONS.

REFERENCE: N/A

CONDITION:

Task performed at anytime or place. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

The trainee must state, without error: the local surf conditions, causes, areas to be avoided and preferred.

PERFORMANCE CRITERIA

COMPLETED	
1.	Stated description of local surf conditions.
2.	Stated local causes of each type.
3.	Stated effects of local contour, jetties, islands and obstructions.
4.	Stated effects of winds.
5.	Stated effects of a opposing current.
6.	Stated local areas to be avoided.
7.	Stated characteristic (depths, shoaling areas, local names for places in operating area) of local area.
	ACCOMPLISHED:
	INSTRUCTOR

DIVISION TWO

SURF ROLL OVER AND SURF CASUALTY PROCEDURES

1. GENERAL OBJECTIVES:

- a. Explain possible casualties that could be encountered during surf operations, rollover, or a partial roll over.
- b. Explain the procedures to be carried out after a surf casualty.

2. TASK LISTING:

SRF-02-01-ANY State the crew procedures when a boat rolls or is caught by the force of a plunging breaker.

SRF-02-02-TYPE State the procedures to be taken when a boat has rolled.

TASK SRF-02-01-ANY

TASK:

STATE THE CREW PROCEDURES WHEN A BOAT ROLLS OR IS CAUGHT BY THE FORCE OF A BREAKER.

<u>REFERENCE</u>: (a) Appropriate sections of the boats type or operator manual.

CONDITION:

Task performed at anytime onboard boat. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

In response to the instructor, the trainee must, without error, state the crew procedures when a boat rolls or is caught by the force of a breaker.

PERFORMANCE CRITERIA

	INSTRUCTOR DATE
	ACCOMPLISHED:/
5.	Stated post rollover precautions and crew condition status.
4.	Stated length of time for roll over.
3.	Stated possible missile hazards.
2.	Stated forces to be expected.
1.	Stated crew personnel protection procedures.
COMPLETED	

TASK SRF-02-02-TYPE

TASK:

STATE THE EXPECTED CONDITIONS AND POST ROLLOVER PROCEDURES FOR A SELF-RIGHTING BOAT THAT HAS ROLLED.

<u>REFERENCE</u>: (a) Appropriate sections of the boats type or operator manual.

CONDITION:

Task performed at anytime onboard boat. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

In response to the instructor, the trainee must, without error, state the likely conditions and procedures for a self-righting boat after a roll-over.

PERFORMANCE CRITERIA

COMPLETED		
1.	Stated likely conditions of antennas and	mast.
2.	Stated likely condition of windows, forward superstructure, and after turtle.	rd
3.	Stated deciding factors to determine to p mission or return.	roceed with
4.	Stated likely condition of engine room.	
5.	Stated correct order of items to be secur checked listed.	ed and
6.	Stated immediate dock side procedures.	
	ACCOMPLISHED: /	
	INSTRUCTOR	DATE

DIVISION THREE

HEAVY SEAS/ROUGH WEATHER OPERATIONS

1. GENERAL OBJECTIVES:

- a. Explain the effects on a boat operating in heavy seas.
- b. Demonstrate ability to operate in heavy seas.
- C. Demonstrate ability to perform an astern tow in 4-6 foot seas.
- d. Demonstrate ability to pass a pump by direct method and by passing a pump on a towline in 4-6 foot seas.
- e. Demonstrate ability to tow a vessel in 4-6 foot seas using a drogue.
- f. Demonstrate ability to safely and efficiently navigate in 4-6 foot seas.

2. TASK LISTING:

- SRF-03-01-ANY Explain the effects of heavy seas on a boat.
- SRF-03-02-ANY Explain safety precautions for operating a boat in heavy seas.
- SRF-03-03-TYPE Operate a boat in heavy seas.
- SRF-03-04-TYPE Demonstrate ability to take a boat in tow in heavy seas.
- SRF-03-05-TYPE Demonstrate ability to direct pass a pump in heavy seas.
- SRF-03-06-TYPE Demonstrate ability to pass a pump down a towline in heavy seas.
- SRF-03-07-TYPE Demonstrate ability to tow a vessel with a drogue deployed in heavy seas.
- SRF-03-08-TYPE Demonstrate ability to navigate in high seas.

TASK SRF-03-01-ANY

T	Δ	C	v	
Ι.	М		N	-

EXPLAIN EFFECTS OF HEAVY SEAS ON A BOAT.

REFERENCE: (a) Chapter 8, Boat Crew Seamanship Manual, COMDTINST M16114.5 (Series)

CONDITION:

Task performed at anytime or place. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

The trainee must state, without error, the effects of heavy seas on a boat.

PERFORMANCE CRITERIA

	INSTRUCTOR DATE	
	ACCOMPLISHED:/	
5.	Stated how each type of sea and swells effects booperations .	at
4.	Stated the effect of winds.	
3.	Stated effects of bottom contour, jetties, island and obstructions.	S
2.	Stated the cause of each type stated.	
1.	Stated the different types of seas and swells.	
COMPLETED		

TASK SRF-03-02-ANY

TASK:

EXPLAIN SAFETY PRECAUTIONS FOR OPERATING A BOAT IN HEAVY SEAS.

CONDITION:

Task performed at anytime or place. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

The trainee must state, without error, safety precautions for operating a boat in heavy seas.

PERFORMANCE CRITERIA

COMPLETED		
1.	Stated required safety equipment.	
2.	Stated use of safety belts and helmets.	
3.	Identified missile hazards.	
4.	Stated effects of fatigue and hypothermia on crew.	
5.	Stated decision criteria to proceed with mission.	
6.	Stated Crew control procedures.	
7.	Explained the boat crew fatigue standards.	
	ACCOMPLISHED:/	
	INSTRUCTOR DATE	

TASK SRF-03-03-TYPE

TASK:

OPERATE BOAT IN HEAVY SEAS.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in 8-10 foot seas. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must operate with head to seas, stern to seas and perpendicular to seas while both making way and maintaining stationary position. Boat must maintain head to sea position whenever boat is stopped.

COMPLETED _	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Inspected boat with all loose gear stowed and water tight integrity maintained.
4.	Tested engine controls prior to departing protected waters.
5.	Observed sea conditions and evaluated.
6.	Identified natural range and landmarks.
7.	Identified safe operating area and hazards.
8.	Maintained bow aspect when in seas at idle.
9.	Avoided breaking waves, if possible.
10.	Used proper power to meet seas when required.

TASK SRF-03-03-TYPE

	INSTRUCTOR		DATE	
	ACCOMPLISHED:	, .		
	for conditions.			
14.	Adjusted speed to allow a stable,	comfort	able ride	a
13.	Operated with stern to seas.			
12.	Operated with bow to seas.	. "		
11.	Maintained proper communications crew.	between	coxswain	and

TASK_SRF-03-04-TYPE

TASK:

DEMONSTRATE ABILITY TO TAKE A BOAT IN TOW IN HEAVY SEAS.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 8-10 foot seas. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must take another boat in stern tow and maintain tow for at least fifteen minutes.

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Inspected boat with all loose gear stowed and water tight integrity maintained.
4.	Observed sea conditions and evaluated.
5.	Evaluated condition of disabled boat.
6.	Established communications with disabled boat.
7.	Located towing appendages and evaluated for strength.
8.	Used proper towing equipment for type, size, and sea conditions.
9.	Evaluated relative rates of drift

TASK SRF-03-04-TYPE

	INSTRUCTOR	ATE
	ACCOMPLISHED: /	
16.	Towed disabled boat for fifteen minutes.	
15.	Determined status of disabled boat.	
14.	Placed disabled boat in step.	
13.	Took slow strain on towline.	
12.	Stated the effect on the disabled vessel.	
11.	Passed drogue to disabled boat and hooked up.	
10.	Made proper approach to disabled boat.	

TASK SRF-03-05-TYPE

TASK:

DEMONSTRATE ABILITY TO DIRECT PASS A PUMP IN HEAVY SEAS.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 8-10 foot seas. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must maintain relative position while alongside a boat and direct pass a pump can.

COMPLETED	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Inspected boat with all loose gear stowed and water tight integrity maintained.
4.	Tested engine controls prior to coming alongside.
5.	Observed sea conditions and evaluated.
6.	Identified safe operating area and hazards.
7.	Maintained bow aspect when in seas at idle.
8.	Briefed receiving boat on procedures.

TASK SRF-03-05-TYPE

	INSTRUCTOR	DATE
	ACCOMPLISHED: /	
13.	Pump can received by disabled boat.	
12.	Maintained relative position.	
11.	Maintained adequate communications between and crew.	coxswain
10.	Used proper inhaul/outhaul tag lines.	
9.	Noted disable vessels relative rate and didrift.	rection of

TASK SRF-03-06-TYPE

TASK:

DEMONSTRATE ABILITY TO PASS A PUMP DOWN A TOWLINE IN HEAVY SEAS.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in daytime in 6-8 foot seas while stern towing another boat. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must pass a pump can along a towline to a towed boat.

PERFORMANCE CRITERIA

COMPLETED		
1.	Briefed Crew, given duties.	
2.	Positioned crew with all safety equipment.	
3.	Inspected boat with all loose gear stowed and water tight integrity maintained.	
4.	Briefed towed boat on procedures.	
5.	Maintained minimum headway while passing pump can.	
6.	Rigged tag lines properly.	
7.	Maintained adequate communications between and crew.	n coxswain
8.	Pump can received by towed boat.	
9.	Proper scope of line used to place pump a position for retrieval.	t a safe
	ACCOMPLISHED: / INSTRUCTOR	DATE

TASK SRF-03-07-TYPE

TASK:

DEMONSTRATE ABILITY TO TOW A DISABLED VESSEL IN HEAVY WEATHER AND ROUGH BAR CONDITIONS WITH THE USE OF A DROGUE.

REFERENCE: N/A

CONDITION:

Task performed while underway for training in 8 to 10 foot seas using a training vessel or other lifeboat.

STANDARDS:

COMPLETED

Trainee must state, without error, effects of a drogue being used on a vessel being towed. Task must be done without endangering the boat or crew. Training vessel must be sturdy and have adequate transom strength to withstand the pull of the drogue.

PERFORMANCE CRITERIA

		·
1.	Explained when a drogue should be	used.
2.	Stated safety precautions to be ob selecting and using a drogue	served when
3.	Explained where a drogue should be a vessel with jammed rudder.	secured when towing
4.	Explained where a drogue should be in a heavy following sea.	secured when towing
5.	Explained how a vessel is effected with a drogue.	when being towed
<u>6.</u>	Stated the proper scope of drogue various sea states.	line to be used in
A	CCOMPLISHED:	/
	INSTRUCTOR	DATE

TASK SRF-03-08-TYPE

TASK:

DEMONSTRATE ABILITY TO NAVIGATE IN HEAVY SEAS.

REFERENCE: N/A

CONDITION:

Task performed on boat prior to underway for preparations and while underway for training in daytime in 8-10 foot seas. Trainee must accomplish task without prompting or use of a reference.

STANDARDS:

Task must be done without endangering the boat or crew. Boat must be piloted at least eight miles with all installed navigation equipment used competently by the tcrainee.

<u>COMPLETED</u>	
1.	Briefed crew, given duties.
2.	Positioned crew with all safety equipment.
3.	Inspected boat with all loose gear stowed and water tight integrity maintained.
4.	Observed sea conditions and evaluated.
5.	Identified safe operating area and hazards.
6.	Determined courses and DR.
7.	Used Radar properly.
8.	Used Loran properly.
9.	Used depthsounder properly.
10.	Aware of speed over ground.
11	Aware of surrounding dangers

TASK SRF-03-08-TYPE

12.	Set proper course for seas.	÷
13.	Maintained continuous control of cr	ew.
14.	Maintained adequate communications and crew.	between coxswain
15.	Aware of the effects of current in boats heading.	relation to the
	ACCOMPLISHED:INSTRUCTOR	/DATE